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Allan Cunningham's cryptic publications

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Abstract

It has been asserted that the botanist/explorer Allan Cunningham (1791–1839) published very little. It is shown that, on the contrary, in the five years while he resided at Strand-on-the-Green (1831–1836) he was remarkably productive, although a large number of his publications were cryptic, buried in the works of others, particularly those of W.J.Hooker (*Curtis's Botanical Magazine*) and J.Lindley (*Edwards's Botanical Register*). The events leading to these cryptic publications are described, and an Appendix listing his publications (7 major, and 57 'cryptic' ones) is presented.

Introduction

Allan Cunningham (1791–1839) is rightly remembered as one of Australia's foremost botanists and explorers of the early 19th century. Cunningham spent about 18 years in Australia (December 1816–February 1831, and February 1837–June 1839). In that time he took part in Oxley's first inland expedition from the Blue Mountains, accompanied Phillip Parker King in four circumnavigations of Australia, making many of the first botanical collections from the north and north-west coasts, visited Timor (twice), Mauritius, Tasmania, New Zealand (twice) and Norfolk Island, and made thousands of collections of plants, many of which later served as type specimens. He led several major expeditions north and south from Bathurst, found Pandora's Pass into the Liverpool Plans, and discovered the Darling Downs, and access to them from Moreton Bay through Cunningham's Gap. He was involved in the establishment of the Newcastle and Moreton Bay colonies, and in later life was consulted on establishment of the colonies at Swan River, Adelaide and various settlements in the Darwin region.

It has often been commented that Cunningham, like other early botanical visitors to Australia, published very little. For example, John Lindley in his notice of Cunningham's death (Lindley 1840, p. 2) said "In this gentleman both Geography and Botany have sustained a real loss; for he was an excellent practical Botanist. How little he regarded posthumous fame is seen by the fewness of his published works, a brief sketch of the Flora of New Zealand being the only systematic account of his Botanical discoveries printed during his life...". In the only modern biography of Cunningham (McMinn 1970) only eight papers by Cunningham are listed (two are incorrectly cited as being published in "Ann. Sci. Nat." [Annales des Sciences Naturelles, Botanique] of 1835, both being wrongly cited references to French notices of Cunningham papers that first appeared in Curtis's Botanical Magazine). Is this a true reflection of his scholarship? I hope to show that it was not.

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Discussion

Cunningham was sent to Australia primarily to make collections of seeds, bulbs and live plants to supplement the King's (private) Garden at Kew – his official title was King's Collector for Kew. He also prepared in parallel pressed specimens to send to William Aiton at Kew and to Joseph Banks (later to Robert Brown) at Soho Square, principally as vouchers for the propagation material. Thus, while surviving herbarium specimens were in fact secondary products of his travels, they have furnished his major legacy.

Cunningham was the son of Allan Cunningham Senior (1742–1828), a Scots gardener from Renfrewshire, who moved to London in the 1780s to become Head Gardener at Wimbledon House, owned by Earl Spencer. Despite his family background Allan Cunningham and his brother Richard both had a very good education, including Greek and Latin. Originally he studied for the law, and worked for a year or two in a conveyancer's office at Lincoln Inn in London. Tiring of this, he spent several years at Kew as Aiton's assistant working on preparing the second edition of *Hortus Kewensis* for publication. In this period he became well acquainted with Robert Brown, who in fact wrote much of *Hortus Kewensis* for Aiton, so he was a well-educated and quite competent botanist by the time he arrived in Australia, well able to reliably identify the plants he was collecting. He was very well aware that he was collecting many previously unknown species, and he expected that these would be described (and his role in discovering them acknowledged) by professional botanists. This did not happen until, as described below, his brother Richard intervened by contacting William Hooker. Allan himself undertook description of his discoveries from 1825.

William Aiton's interest was in redeveloping Kew as the leading botanic garden in Europe after the disruption of the Napoleonic Wars. This meant cultivating the largest possible number of rare, new and unusual plants. While he welcomed the flow of new propagation material from Australia, he had an interest only in displaying it, not in describing it. His motivation was horticultural rather than scientific. The specimens sent to Banks were added to his herbarium, along with material from many other sources, but Banks had long moved on from undertaking botanical research to matters of state. His librarian Robert Brown inherited Banks's herbarium on the latter's death in 1820, and eventually took it with him when appointed first Keeper of Botany in the British Museum. However, lack of interest in his first attempt to produce an account of the Australian flora, his *Prodromus* (Brown 1810), had blunted Brown's interest in large scale descriptive works and thereafter he wrote mainly short taxonomic papers on restricted groups. This aroused the displeasure of, among others, Lindley (1832, t. 1514), who in discussing Dillwynia glycinifolia complained "Its genus, however, is to us, as it was to Smith and De Candolle, a matter of uncertainty, which, unfortunately for science, seems little likely to be cleared up, although it is now nearly thirty years since materials for the completion of the Flora of Australia were furnished by the liberality of the British government. It is time that this were looked to: and much to be wished that some enterprising naturalist would convert to an useful purpose the rich stores of information regarding Australasian Vegetation procured at the national expense, and now open to all inquirers, which are lying unemployed at the British Museum. When we see the fate of the plants collected in Flinders's expedition [i.e. Robert Brown's collections], and in the fatal journey up the Congo by the lamented Christian Smith, we can scarcely wonder that a wise and careful government should object to pay the expenses of scientific expeditions."

Although Cunningham was forbidden under his employment contract from sharing his collections with others, for fear that they would 'leak' to the nursery trade in England, diluting Kew's novelty value, he was aware that colonists in New South Wales were sending seeds home, as were some of the officers and crew on King's voyages, and some of the members of his inland expeditions. Matters became more serious when William Baxter arrived in the colony, to undertake wholesale seed collecting for the nurseryman Henchman and others during the 1820s. Baxter made several trips to King Georges Sound and other localities in SW Western Australia (1823–25, 1828–29). There he re-collected a number of undescribed species which Cunningham had found several years earlier, but which languished neglected in London.

At this time William Hooker was Professor of Botany at Glasgow University, and Allan Cunningham's brother Richard was William Aiton's amanuensis, and, in effect, deputy. [To avoid confusion, hereafter Richard Cunningham will be referred to by his full name, 'Cunningham' used alone refers to Allan Cunningham]. Richard was very concerned about the lack of recognition of his brother's work and, in a series of letters to Hooker in the period 1823–1829, developed a scheme whereby Richard would privately send live specimens of new plants that had been collected by his brother and flowered at Kew to Hooker for publication in *Curtis's Botanical Magazine*, the supporting notes coming from Allan's diaries but disguised so as to protect his position. Towards the end of this period Aiton reluctantly gave limited approval for material to be sent to Hooker, but actually authorised very little (various letters from Richard Cunningham to Hooker). Richard sent specimens anyway, and suggested that Hooker thank Aiton for his generosity, which he did! In mid-1824 Allan Cunningham wrote to his brother from Sydney "I wish I could fairly (situated as I am in relation to Kew) send periodically to Dr. Hooker specimens of my plants, after supplying Mr. Aiton's & Mr. Brown's Herbaria. I wish to

act uprightly to all concerned, but when I consider that the persons to whom I am <u>bound</u> to send my plants do not publish them, but rather sedulously study to keep them from the public &c, thereby giving full opport for others to claim the merit of Discovery, I regret it much, & feel disposed to give that to others who would do justice to any thing interesting I might send. I have no hesitation in saying that so soon as I am released from my present tie, I shall not scruple to act as I have said." The original of this letter has been lost, but the above extract was quoted by Richard Cunningham in a letter to Hooker (Cunningham 1825).

Allan Cunningham requested recall to England in the late 1820s, and arrived back in July 1831, renting a cottage at Strand-on-the-Green across the river from Kew. There he began the task of sorting and studying his collections. He was now free of his contractual obligations and lost no time in taking up his own correspondence with Hooker. It was arranged that Richard Cunningham would send Hooker from time to time choice fresh specimens of new Cunningham taxa which had flowered in Kew, and Allan would supply Hooker with text. Hooker would prepare the drawings and publish the descriptions in *Curtis's Botanical Magazine*. The text that Allan Cunningham prepared was complete, as required for publication. He supplied names, Latin descriptions, notes on provenance and habitat, and often discussion of related or confusable taxa. This text still survives in the original letters in the Director's Correspondence files at Kew, and matches the published text virtually word for word. From comments in some later letters to Hooker from Cunningham, it appears that towards the end of this collaboration, Cunningham was sometimes providing the text directly to the printer in London, who inserted it appropriately adjacent to Hooker's illustration. This was the case with, for example, *Eurycles*, discussed below.

The first instance of this collaboration between Cunningham and Hooker was the case of Geitonoplesium. Cunningham wrote to Hooker (Cunningham 1832) pointing out that Brown had described a New South Wales plant as Luzuriaga cymosa. Cunningham had spoken with Brown at Kew and together they had examined the N.S.W. plant in flower. Both agreed that the N.S.W. plant was not *Luzuriaga* (a Peruvian genus). Cunningham commented "Believing as I now do that Mr. Brown has no Intention to correct his mistake himself, I now make you the Comments with a view of providing a brief remark on the plant, which you have had some time before you for publication." The description of Geitonoplesium cymosum appeared a month later in Curtis's Botanical Magazine vol. 59 (Feb. 1832) as Plate 3131. The text accompanying it is a masterpiece of diplomacy. As Cunningham had suggested in his letter, Hooker adopted Brown's previous description under *Luzuriaga* as the basis of the new genus, and Brown's diagnosis of the species after the new combination. Cunningham's suggestion of this combination was given as 'in litt'. The derivation of the name and its general distribution at the bottom of the page are virtually verbatim from Cunningham's letter (and attributed to him). On the second text page Mr. Aiton is credited with sending the live material (although this had been done by Richard Cunningham), and Brown is acknowledged as originally doubting the assignment to Luzuriaga. Most of the remaining text is taken directly from Cunningham's letter, slightly paraphrased. All egos were thus protected. This is the first of Cunningham's cryptic publications, but as the Code provides that a name is only to be attributed to an author in the publication of another when both the name and description are clearly indicated as having been supplied by that author, judged on internal evidence [author's emphasis], the combination Geitonoplesium *cymosum* is correctly attributed to Brown, although the expanded form A.Cunn. ex R.Br. is certainly warranted in this case (*Geitonoplesium cymosum* (R.Br.) A.Cunn. ex R.Br.).

The following month, on 8th March, Cunningham wrote again to Hooker. Richard Cunningham had just sent to Glasgow from Kew live material of eight Cunningham plant introductions, and Allan supplied the necessary text. The plants were *Pittosporum cornifolium* A.Cunn. *mss* from New Zealand, and the Australian Hymenanthera dentata R.Br., Baeckea saxicola, Leucopogon lanceolatus R.Br., 'Leucopogon gnidiifolius' (based on Styphelia gnidium Vent., but the new combination never formally published), Acrotriche ovalifolia R.Br., Epacris onosmaeflora A.Cunn. and Anthocercis albicans A.Cunn. Pittosporum cornifolium A.Cunn. appeared in Curtis's Botanical Magazine (1832) as t. 3161, and the previously described species Hymenanthera dentata R.Br. appeared as t. 3163 with Cunningham's notes attached. Baeckea saxicola appeared as t. 3160, with the name attributed to Cunningham. However he did not supply Hooker with a Latin diagnosis in his letter (only details of collection and habit, which were reported by Hooker), and the formal description omits his name. The name is thus nomenclaturally Baeckea saxicola A.Cunn. ex Hook. Leucopogon lanceolatus R.Br. appeared as t. 3162 in the same publication with notes by Cunningham, separating it from Styphelia gnidium Vent. (now Leucopogon parviflorus (Andrews) Lindl.). This second Leucopogon species was not illustrated in Curtis's Botanical Magazine by Hooker, although his remarks under L. lanceolatus indicate that he intended to. In a later letter (Cunningham 1833) Cunningham explained to Hooker that there had been a mix up of seeds at Kew. The plant that they had grown as 'L. gnidium', allegedly from seed collected from N.S.W. (New South Wales), was in fact from his King George Sound seed. Lindley had subsequently published this plant in Edwards's Botanical Register as t. 1560 (1833), calling it Styphelia parvifolia Andrews, but Cunningham was scathing in his criticism of the illustration in Andrews' Botanists Repository (Andrews 1803) ("...as for the wretched [illustration] of the Bot. Rep^y named Styphelia parviflora, which was clearly a Kind of Leucopogon, no human being could say what it was, without a perfect knowledge of the history of the plant."). Acrotriche ovalifolia R.Br. appeared as t. 3171 with Cunningham's notes attached. Epacris onosmaeflora A.Cunn. appeared as t. 3168, with the name and description attributed to Cunningham, based on his previous publication of the species in Field's Memoirs (Cunningham 1825). Anthocercis albicans A.Cunn., published by him in Field's Memoirs, was never illustrated by Hooker in Curtis's Botanical Magazine. For all contributions Mr. Aiton was thanked for providing live material (actually sent by Richard Cunningham).

Richard Cunningham sent another three large batches of living material (41 species) to Hooker during April 1832, and Allan Cunningham provided notes on all of them in a letter of 30th April (Cunningham 1832). In this letter he mentioned that he intended to embark on a detailed enumeration of Australian *Acacia*, a genus which he had found wherever he went. This enumeration was never published in its entirety, but he subsequently sent Hooker a large number of accounts of individual species. He also mentioned in particular *Grevillea robusta* A.Cunn. ex R.Br., which Kew had growing from his seed, but which he expected would never flower in Europe. He sent an herbarium specimen for Hooker to use in his drawing, supplementary to fresh leaves supplied by Richard Cunningham. This plant appeared as t. 3184 in *Curtis's Botanical Magazine*. Of the 41 plants sent to Hooker, 16 eventually appeared in *Curtis's Botanical Magazine* and are listed under cryptic publications in the Appendix below.

In May Cunningham received two pieces of unwelcome news. From Sydney he heard that his old friend Charles Fraser, the Colonial Botanist, had died. This news was ameliorated by the appointment of his brother Richard in Fraser's place. Richard Cunningham took up the position in January 1833. The other news was that Hooker would have to stand down as editor of *Curtis's Botanical Magazine* at the end of the year, due to falling subscriptions.

In July 1832 Cunningham wrote a long letter to Hooker summarising extensive research he had undertaken into the trade in New Zealand Flax (*Phormium tenax*). This letter was reprinted verbatim over five pages of the *Botanical Magazine* (t. 3199), one of the largest contributions that Cunningham made to this publication. In early September he sent Hooker an emended description of a *Daviesia* specimen forwarded from Kew some months earlier. This was published as *Daviesia virgata* A.Cunn. (t. 3196) shortly afterwards. In late September he heard from Hooker that the latter would continue as editor of *Curtis's Botanical Magazine*, but with apparently inferior recompense, and the subscription price was to be raised. The bad news from Cunningham's viewpoint was that he now found himself unable to directly access the living collections at Kew to send samples to Hooker. Richard Cunningham, now Colonial Botanist, had been able to do so, but Allan did not have staff privileges. To some extent this was overcome, because in late November Cunningham sent Hooker four new live samples, received "per Messenger" from Kew. It is possible he obtained these from his friend John Smith, the head gardener.

Cunningham sent Hooker eight more plants in April 1833, but of these only one was accepted for publication: *Leucopogon richei* (Labill.) R.Br., t. 3251 (Fig. 1). This was the "Leucopogon gnidifolius" sent a year earlier. Cunningham and Brown had spent some time investigating it, both in Kew and in commercial nurseries (Lowe's and Loddiges'), discovering that it had been grown under at least four names in London. Cunningham provided a new Latin diagnosis, synonymy, and a 5-page account of its discovery.

Brown and Cunningham visited Kew on 20th May 1833, and as a result Cunningham sent six more specimens to Hooker, with descriptions following on 17th June. Of these, *Epacris heteronema* Labill., *Dracophyllum secundum* R.Br., *Calytrix virgata* A.Cunn., and *Plagianthus divaricatus* J.R.Forst. & G. Forst. were published in *Curtis's Botanical Magazine*. The *Calytrix* is particularly noteworthy. Cunningham appended to this description a short monograph, including key, of the 12 species known at that time. It is unfortunate that the name *C. virgata* coined at that time is illegitimate, being a replacement name for the valid *C. ericoides* A.Cunn. (now synonymous with *C. tetragona* Labill.)

In July 1833 Cunningham sent another consignment of four plants, which had been "sent over to him from the Gardens [Kew]". All four of these, Cargillia australis R.Br. (now Diospyros australis (R.Br.) Hiern), Beaufortia dampieri A.Cunn. (now included in Beaufortia sprengelioides (DC.) Craven), Pimelea arenaria A.Cunn., and Marsdenia flavescens A.Cunn. (Fig. 2) appeared in Curtis's Botanical Magazine. During August and September Cunningham was unwell, suffering from what appears to be severe migraine headaches, which affected his sight. In November however he sent Hooker another nine specimens, with descriptions following in December. Of these Westringia cinerea R.Br. (now included in W. dampieri R.Br., a specimen of which was also sent at this time, but not illustrated), Trachymene lanceolata (Labill.) Spreng. (now Platysace lanceolata (Labill.) Druce), Cyminosma oblongifolia A.Cunn. ex Hook. (now Acronychia oblongifolia (A.Cunn. ex Hook.) Endl. ex Heyhn.), Alyxia ruscifolia R.Br., and Alyxia daphnoides A.Cunn. (now A. gynopogon Roem. & Schult.) were all subsequently illustrated in Curtis's Botanical Magazine. The case of Cyminosma is interesting. Cunningham

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Fig. 1. Leucopogon parvifolius (Andrews) Lindl., illustrated in Curtis's Botanical Magazine 60: t. 3251 (1833) as Leucopogon richei, from material grown at Kew, from seeds collected by Allan Cunningham at King Georges Sound. Cunningham, with Robert Brown, spent some time establishing the identity of the species, and Cunningham provided a detailed account of its original provenance by Riche.

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Fig. 2. *Marsdenia flavescens* A.Cunn. illustrated in *Curtis's Botanical Magazine* 60: t. 3289 (1833), and described there by Cunningham.

had thought his plant represented a new genus and sent Hooker a detailed Latin description. Hooker chose not to use this, treating the taxon as a species of the pre-existing *Cyminosma*, and crediting Cunningham only with the name, not the description. The authority is thus A.Cunn. ex Hook. The two *Alyxia* species are noteworthy in that Cunningham provided a synopsis of the genus, which was appended to the *A. daphnoides* treatment. In a letter to Hooker of 3rd April 1834 Cunningham complained of the number of typographical errors in the treatments of *Alyxia*, and eventually persuaded Hooker to let him proof-read his contributions by liaising with the London printer. The following day Cunningham wrote again to Hooker to tell him of some *Pterostylis* species that were flowering at Kew, and to say that Mr Aiton had informed him some 4 months earlier that he was thinking of sending Hooker some specimens, and drawings by the Kew artists (see Mabberley 2004 for discussion).

On 15th April 1834 Cunningham again forwarded plants received from Kew, this time six species. Of these only three, *Pimelea hypericina* A.Cunn. (now *P. ligustrina* subsp. *hypericina* (A.Cunn.) Threlfall) *Acacia elongata* Sieber ex DC. and *Acacia umbrosa* A.Cunn. ex G.Don (now *A. binervata* DC.) were accepted for publication. No further Australian plants of Cunningham's introduction flowered in Kew for the next six months. In October he sent Hooker live material of *Chilodia scutellarioides* R.Br. (now *Prostanthera scutellarioides* (R.Br.) Briq.) which appeared in the *Botanical Magazine* as t. 3405 with a detailed history by Cunningham. With the *Chilodia* was sent *Westringia eremicola* A.Cunn. ex Benth. (t. 3438), and a number of others which were not published.

On 26th November 1834 Cunningham told Hooker that he had just received a large collection of New Zealand plant specimens from his brother Richard, including a number of new species. Richard had visited New Zealand in 1833–34, staying mainly in the Bay of Islands region. Allan had resolved to drop all other projects to compile a Flora of New Zealand, based largely on his own 1826 collections, and those of Richard. This Flora was eventually published serially by Hooker in the *Companion to the Botanical Magazine* and *Annals and Magazine of Natural History* between 1836 and 1840. In the same letter he stated that he had sent Lindley some notes on a *Dendrobium* collected by Richard. This was published in *Edwards's Botanical Register* of 1836 (t. 1828: *Dendrobium cassythoides* R.Cunn.).

Cunningham sent Hooker a box containing two live specimens, *Isopogon spathulatus* R.Br. and *Cryptandra* amara Sm. on 23rd February 1835. By return mail he received a letter of complaint from Hooker, stating that the plants were quite unsuited to *Curtis's Botanical Magazine*, and Hooker had been put to needless expense in taking delivery of them (at this time postage was usually paid on receipt of letters and packets, not at despatch). In the reorganisation of *Curtis's Botanical Magazine* which had taken place three years earlier Hooker had been instructed that only plants of high horticultural merit were to be included. Scientifically interesting but not showy did not qualify for entry. Cunningham replied on 3rd March (by prepaid letter!) that he would probably not be sending much more for Curtis's Botanical Magazine, as most of the remainder of his introductions to Kew "...want in general, that external gloss or show which appears essential to meet the Eye of a public...". He confirmed that he had provided text for *Acacia undulifolia* A.Cunn. ex G.Don to the printer and was about to send that for *Eurycles cunninghamii* Aiton ex Lindl. (now *Priophys cunninghamii* (Aiton ex Lindl.) Mabb.). These two contributions were published as t. 3394 and t. 3399 respectively, the latter notable for including a synopsis of the genus Eurycles by Cunningham. The last despatch of specimens by Cunningham from Kew came on 5th March 1835, when he sent two species of *Isopogon* and his *Acacia prominens* A.Cunn. ex G.Don. Only the last was published. Cunningham's last cryptic paper, a generic synopsis, appeared in the 1836 Curtis's Botanical Magazine, under Veronica labiata R.Br., t. 3461, where he described a number of his brother's New Zealand Veronica species.

Over a period of five years Cunningham had loyally supported Hooker and *Curtis's Botanical Magazine* against Lindley and *Edwards's Botanical Register*, which he viewed as inferior. His aim was to gain recognition as the discoverer of new plants, not necessarily as their describer. On several occasions in letters to his brother and to Hooker, he expressed his regret that "Professors of Botany" (i.e. Lindley, Brown, and latterly various European botanists) had not described his new discoveries. For this he principally blamed Brown and Aiton, for not making them available to the wider scientific community. However, from 1831 to 1836 he had access to his living introductions at Kew, and he took pains to bring these to Hooker's attention. Lindley, however, was antipathetic to Kew and Aiton. In his treatment of *Isopogon formosus*, Lindley (1829) had stated "*This, the most beautiful of its genus, is said to have been introduced so long since as the year 1805 to the Kew Garden.* As far, however, as the public is concerned, the date of its introduction may be more properly fixed in 1824, when it was raised by Mr. Mackay, from seeds collected in the neighbourhood of Lucky Bay, by Mr. Baxter, on his first visit to the west coast of New Holland. It is right, that in all questions about the period at which plants have been introduced, this distinction should be borne in mind, and that the world should be aware that the introduction of a plant to his Majesty's Garden at Kew, is a very different affair from its introduction to Great Britain. An object

cannot be properly said to be introduced from one country to another, unless it is afterwards disseminated by such means as the introducer possesses; a practice which is adopted in every establishment in the world. save in that one which ought to set an example to all others." Lindley (1832) also criticised the lack of progress on describing the accessions received from abroad by Kew and the British Museum (Robert Brown) (see above). Lindley instead took the part of the commercial nurserymen, and *Edwards's Botanical Register*, which he edited, almost exclusively reported on introductions by the nurseries or their rich landed customers. On at least two occasions Cunningham wrote to Hooker warning him that Lindley had had drawings made for the *Register*, of plants which Hooker was in the process of publishing in the *Magazine*.

Despite his reservations, Cunningham maintained polite contact with Lindley, as he did with all the senior botanists in London, Scotland, Ireland and on the Continent. Heward (1842) noted (p. 116) that Cunningham frequently entertained botanists and like-minded friends at his cottage at Strand-on-the-Green, and provided them with access to his herbarium. Visitors certainly included Robert Brown and David Don, mentioned in letters to Hooker, but possibly not Lindley. However Cunningham did recognise Lindley as a pre-eminent authority on orchids, and obviously sent him duplicates of all or most of his Australasian Orchidaceae. Lindley published a substantial number of these in his monograph of the family (Lindley 1830–1840). These publications, however, must be attributed to Lindley, as he seems only to have used Cunningham's names, not his descriptions. These taxa are thus to be cited as, e.g. Caladenia clavigera A.Cunn. ex Lindl. However, when Hooker made it clear that he could not publish non-showy Australian plants, Cunningham turned to Lindley and Edwards's Botanical Register. In 1832 Cunningham had sent Hooker for Curtis's Botanical Magazine material of Leucopogon parviflorus (as Styphelia gnidium), but Hooker had not published it, only referring to the species under L. lanceolatus, and publishing a Cunningham cryptic paper (see Appendix, Cunningham 1832c). The following year Cunningham sent the same material and notes to Lindley, and the notes were published (Lindley 1833a), with Lindley only acknowledging that the information had come from Cunningham. In the same issue of *Edwards's Botanical Register* Lindley acknowledged receipt of material of Gompholobium lanatum from Cunningham under t. 1563, Gompholobium capitatum. Cunningham also contributed remarks on *Pultenaea mucronata* under *P. rosmarinifolia* (Lindley 1833b). The following year Lindley (1834) gave Cunningham more credit, when, under *Billardiera ovalis* (t. 1719) he described the genus Cheiranthera and a single species, C. linearis. Both the genus name and specific epithet were attributed to Cunningham, but Lindley ostensibly provided the descriptions, meaning that the authorship of each name is to be cited as A.Cunn. ex Lindl. The phraseology of the habitat description is clearly that of Cunningham. Lindley (1835) published a note on the New Zealand species *Clianthus puniceus* in which he also described two Australian species of *Clianthus*, based on Cunningham names, but again with his own descriptions. This article was reprinted in part in *Edwards's Botanical Register* of 1835 (21: t. 1775) with mention of Cunningham's contribution. In 1836 Lindley finally allowed Cunningham space in *Edwards's Botanical Register* to publish his own short article, an account of Australian *Tristania* species under *T. macrophylla* (t. 1839). The name, but not the description, of *T. macrophylla* was attributed to Cunningham, so the technical authorship of this name must be A.Cunn. ex Lindl. However, the attached article is clearly attributed solely to Cunningham, and in it he describes three new species, *T. umbrosa* A.Cunn., *T. psidioides* A.Cunn., and *T. salicina* A.Cunn. In the same issue, under *Dendrobium densiflorum*, Lindley had inserted a note by Allan Cunningham, conveyed from his brother Richard, in which the species Dendrobium cassythoides R.Cunn. (now Erythrorchis cassythoides (R.Cunn.) Garay) is described. Later the same year Allan Cunningham contributed a note on apetalous Fuchsia species. Cunningham's final contribution to Edwards's Botanical Register was posthumous. When Lindley described *Dendrobium cucumerinum* (Lindley 1843) he included a five page essay by Cunningham on the geographical distribution of Australian orchids.

As well as the short communications discussed above, Cunningham also published seven major stand-alone papers. The first of these were two chapters contributed to Field's *Memoirs* in 1825, one of which enumerated 102 species collected mainly north of Bathurst, of which 67 were newly described, as well as a new genus, *Fieldia*. In 1827 he contributed a substantial botanical Appendix to P.P. King's *Narrative*. On his return to Britain he took an active part in the scientific community, publishing an account of inland exploration of New South Wales up until 1832, with a detailed map, in the *Journal of the Royal Geographical Society* in 1832. Later the same year, in the same issue of the *Journal* Cunningham made two further contributions. A letter had been received from Lieut.-Colonel Dumaresq describing how a recaptured escaped convict claimed that he had twice followed a broad navigable river from the western side of Liverpool Plains north-west to the Gulf of Carpentaria, where it emptied into a vast lake. At its northern end aborigines described Malays with bows and arrows, who were harvesting large numbers of sandalwood trees. Cunningham corresponded with the Secretary of the Geographical Society (drafts of this correspondence are held in the Mitchell Library, Allan Cunningham Papers 1827–32, f. 10–12, Call No. D 79), showing that the convict had almost certainly travelled from the Castlereagh River to the Gwydir, and followed it for some distance, but that it was impossible that

he had reached the Gulf, and his accounts of baboons, hippopotamus and Malay fishermen were inventions. In a separate article, two letters from Surveyor-General Major Mitchell's expedition to the Peel and Namoi Rivers were published, and again Cunningham provided a commentary, concluding that no major new discoveries had been made, but the probability that all the northern inland rivers eventually drained into the Darling had been increased.

Shortly afterwards Cunningham published a paper on the geology of the north-western slopes of New South Wales and the Moreton Bay region, in the *Proceedings of the Geological Society of London* in 1834–35, a description of a *Grevillea* species in the *Narrative* of his friend T.B.Wilson R.N. in 1835, a Flora of New Zealand in 1836–1840, and an account of the Kiwi in the *Annals and Magazine of Natural History* in 1840 (see Appendix for full bibliographic references of all of the above). He was elected a Fellow of the Linnean Society, and his Life Membership fees were refunded to him in recognition of his accomplishments.

He clearly intended to publish much more. Among his papers at Kew and the Natural History Museum are hundreds of draft descriptions of the plants he had collected. He almost certainly would have written a Flora of Norfolk Island had S.F.L. Endlicher not forestalled him. The tragic death of Richard Cunningham and subsequent recall of Allan to New South Wales cut his research and writing short, and ultimately hastened his own death. Had this not occurred it is possible that Allan Cunningham might well have completed the Australian Flora account begun by Robert Brown in 1810, and about which Lindley was complaining in 1832. It took another 30 years before Bentham finally prepared a comprehensive Australian Flora, (Bentham 1863–1878), drawing in part on Cunningham's collections. Candolle also published a large number of Cunningham taxa, usually taking up his manuscript names. This was particularly the case for the Asteraceae (Candolle 1836), for which Cunningham sent at least two large consignments of specimens to Geneva.

Conclusions

Cunningham was well aware of the new taxa that he had discovered, and assigned many manuscript names to his specimens. These specimens, with their manuscript names, were distributed widely. Other authors, mostly long after his death, often picked up these manuscript names, and his legacy lives on in the more than 450 species names and several genus names listed in the Australian Plant Name Index with the authority "A.Cunn. ex ...". The publishing authors are a Who's Who of major botanists, including particularly G. Bentham and A.P. de Candolle, but also G. Don, W.G. Walpers, J.C. Loudon, J.C. Schauer, C.D.F. Meisner, S.F.L. Endlicher, W.J.Hooker, J.D.Hooker, E. Fenzl, F.J.H. von Mueller, J. Steetz, J. Decaisne, , R. Brown, J. Lindley, A. Gray, F.A.W. Miquel, and others.

Cunningham's publications are listed in the Appendix to this paper. There, seven major papers (including a complete Flora of New Zealand), and 57 shorter "cryptic" papers are listed, covering subjects as diverse as botanical taxonomy, geology, physical geography, botanical geography (in which he was one of the earliest researchers), and zoology. Not discussed here are the numerous, often lengthy, official reports that he prepared after each expedition for the colonial government, and official and unofficial submissions to other enquiries (particularly the Bigge Commission into the governance of New South Wales towards the end of Macquarie's governorship, and various proposals for the establishment of colonies in Queensland, South Australia, Western Australia and the Northern Territory). Together they make an impressive showing, particularly when it is remembered that while he was employed as King's Collector for Kew he was effectively barred from publishing on botany. His incredible productivity surely refutes Lindley's view (and that of others) that his published output was sparse.

Acknowledgments

The staff of the Botany Library, Natural History Museum, the Archives, Royal Botanic Gardens, Kew, the Mitchell Library, Sydney, and the National Library of Australia, Canberra, are thanked for facilitating my access to the documentary sources in their institutions. Original literature was also consulted at the library of the Australian National Herbarium, Canberra. Part of this work was carried out while the author was Australian Botanical Liaison Officer at Kew, a position then funded by the Australian Biological Resources Study (ABRS), but now unfortunately discontinued. Annette Wilson (ABRS) kindly commented on a first draft of the paper. Two anonymous referees provided useful feedback.

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Bentham G (1863–1878) Flora Australiensis. vols 1–7. (Lovell Reed: London)

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Candolle AP de (1836) Prodromus Systematis Naturalis Regni Vegetabilis, vol. 5. (Treuttel & Wurtz: Paris, Strasbourg, London)

Cunningham A (1825) A specimen of the indigenous botany of the mountainous country between the colony around Port Jackson and the settlement of Bathurst..., pp. 323–365, in B. Field, *Geographical Memoirs on New South Wales by Various Hands*. (John Murray: London)

Cunningham A (1832) Letter, Allan Cunningham to William Hooker, dated 30 April 1832. Archives, Royal Botanic Gardens, Kew, Director's Correspondence, Australian letters, DC72, f. 13.

Cunningham A (1833) Letter, Allan Cunningham to William Hooker, dated 14 February 1833. Archives, Royal Botanic Gardens, Kew, Director's Correspondence, Australian letters, DC72, f. 22.

Cunningham R (1825) Letter, Richard Cunningham to William Hooker, dated 13 February 1825. Archives, Royal Botanic Gardens, Kew, Director's Correspondence, Australian letters, DC72, f. 74.

Heward R (1842) Biographical Sketch of the Late Allan Cunningham, Esq., F.L.S., M.R.G.S., &c. (Privately Published: London) [Reprinted, with new pagination, from the *Journal of Botany* of the same year].

Lindley J (1829) *Isopogon formosus*. Handsome Isopogon. *Edwards's Botanical Register* 15: t. 1288. (James Ridgeway: London)

Lindley J (1830–1840) The Genera and Species of Orchidaceous Plants. (Ridgeways: Piccadilly)

Lindley J (1832) Dillwynia glycinifolia. Glycine-leaved Dillwynia. Edwards's Botanical Register 18: t. 1514. (James Ridgeway: London)

Lindley J (1833a) *Leucopogon parviflorus*. Small-flowered Whitebeard. *Edwards's Botanical Register* 18: t. 1560. (James Ridgeway: London)

Lindley J (1833b) *Pultenaea rosmarinifolia*. Rosemary-leaved Pultenaea. *Edwards's Botanical Register* 19: t. 1584. (James Ridgeway: London)

Lindley J (1834) Billardiera ovalis. Oval-leaved Billardiera. Edwards's Botanical Register 20: t. 1719. (James Ridgeway: London)

Lindley J (1835) Note upon a handsome and hardy plant called *Clianthus puniceus*. *Transactions of the Horticultural Society of London* ser. 2 1: 519–522 (1835) [Description of *Clianthus dampieri* A.Cunn. ex Lindley and Clianthus oxleyi A.Cunn. ex Lindl., both now *Swainsona formosa* (G.Don) Joy Thomps.]

Lindley J (1836) *Tristania macrophylla*. Large-leaved Tristania. *Edwards's Botanical Register* 22: t. 1839. (James Ridgeway: London)

Lindley J (1840) Death of Mr. Allan Cunningham. *Edwards's Botanical Register* 26: 1–3. (James Ridgeway: London)

Lindley J (1843) Dendrobium cucumerinum. Cucumber Dendrobium. Edwards's Botanical Register 29: t. 37. (James Ridgeway: London)

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APPENDIX

Allan Cunningham's publications

The following is a list of all publications which I have located in which Allan Cunningham was involved, either as sole author, or as a contributing author (the latter mainly in *Curtis's Botanical Magazine* and *Edwards's Botanical Register*).

A. Major stand-alone publications

Cunningham A (1825a) A specimen of the indigenous botany of the mountainous country between the colony around Port Jackson and the settlement of Bathurst..., pp. 323–365, in Field B, *Geographical Memoirs on New South Wales by Various Hands*. (John Murray: London)

Cunningham A (1825b) Journal of a route from Bathurst to Liverpool Plains, pp. 131–191, in Field B, Geographical Memoirs on New South Wales by Various Hands. (John Murray: London)

Cunningham A (1827) A few general remarks on the vegetation of certain coasts of Terra Australis, and more especially of its north-western shores, pp. 497–533, Appendix to King PP, *Narrative of a Survey of the Intertropical and Western Coasts of Australia*, Vol. 2. (John Murray: London)

Cunningham A (1832) Brief view of the progress of interior discovery in New South Wales, *Journal of the Royal Geographical Society of London* 2: 99–132, plus Map.

Cunningham A (1834–35) On the physical and geological structure of the country to the west of the Dividing Range between Hunter's River (lat. 32°S.) and Moreton Bay (lat. 27°S.), with observations on the geology of Moreton Bay and Brisbane River, New South Wales, *Proceedings of the Geological Society of London* 2: 107, 109–111.

Cunningham A (1836–1840) Florae Insularum Novae Zelandiae Precursor: or a specimen of the botany of the islands of New Zealand, *Companion to the Botanical Magazine* 2: 222–233, 327–336, 358–378 (1836–1837); *Annals and Magazine of Natural History* 1: 210–216, 376–381, 453–462 (1838); 2: 44–52, 125–132, 205–214 (1839); 3: 29–34, 111–115, 244–250, 314–319 (1839); 4: 22–26, 106–111, 256–262 (1840).

Cunningham A (1840) On the habits of the *Apteryx australis*, a bird of New Zealand, closely allied to the Struthionidae and named by the native inhabitants "Kiwi", *Annals and Magazine of Natural History* 4: 312–314.

B. Cryptic publications, contained within the works of others

Brown R & Cunningham A (1832), *Geitonoplesium cymosum*. Cymose Geitonoplesium, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3131. (S.Curtis: London) [Still treated as *Geitonoplesium cymosum* (R.Br.) A.Cunn. ex R.Br.].

Cunningham A (1832a) *Baeckea saxicola*, Stony Baeckea, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3161. (S.Curtis: London) [Now *Thryptomene saxicola* (A.Cunn. ex Hook.) Schauer].

Cunningham A (1832b) *Pittosporum cornifolium*, Cornel-leaved Pittosporum, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3161. (S.Curtis: London) [Still treated as *Pittosporum cornifolium* A.Cunn.].

Cunningham A (1832c) *Leucopogon lanceolatus*, Lanceolate Leucopogon, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3162. (S.Curtis: London) [Now treated as *Leucopogon affinis* R.Br.].

Cunningham A (1832d) *Hymenanthera dentata*, Tooth-leaved Hymenanthera, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3163. (S.Curtis: London) [Now treated as *Melicytis dentatus* (R.Br. ex DC.) Molloy & Mabb.].

Cunningham A (1832e) *Epacris onosmaeflora*, Onosma-flowered Epacris, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3168. (S.Curtis: London) [Now *Epacris purpurascens* var. *onosmiflora* (A.Cunn.) Maiden & Betche].

Cunningham A (1832f) *Acrotriche ovalifolia*, Oval-leaved Acrotriche, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3171. (S.Curtis: London) [Now included in *Acrotriche cordata* (Labill.) R.Br.].

Cunningham A (1832g) *Pterostylis banksii*, Large-leaved Pterostylis, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3172. (S.Curtis: London) [Still treated as *Pterostylis banksii* A.Cunn.].

Cunningham A (1832h) *Acacia cinerascens*, Grey Fragrant Acacia, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3174. (S.Curtis: London) [Now included in *Acacia binervia* (J.C.Wendl.) J.F.Macbr.].

Cunningham A (1832i) Eriostemon myoporoides, Cuspidate Eriostemon, in Hooker WJ, Curtis's Botanical Magazine 59: t. 3180. (S.Curtis: London) [Now Philotheca myoporoides (DC.) Bayly].

Cunningham A (1832j) *Grevillea robusta*, Gigantic Grevillea, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3184. (S.Curtis: London) [Still treated as *Grevillea robusta* A.Cunn. ex R.Br.].

Cunningham A (1832k) *Grevillea canescens*, Hoary Grevillea, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3185. (S.Curtis: London) [Now *Grevillea arenaria* var. *canescens* (R.Br.) Olde & Marriott].

Cunningham A (1832l) *Acacia ruscifolia*, Butcher's-broom-leaved Acacia, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3195. (S.Curtis: London) [Now *Acacia verticillata* var. *ruscifolia* (A.Cunn. ex G.Don) Court].

Cunningham A (1832m) *Daviesia virgata*, Twiggy Daviesia, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3196. (S.Curtis: London) [Now included in *Daviesia leptophylla* A.Cunn. ex G.Don].

Cunningham A (1832n) *Phormium tenax*, New Zealand Flax, in Hooker WJ, *Curtis's Botanical Magazine* 59: t. 3199. (S.Curtis: London) [Still treated as *Phormium tenax* J.R.Forst. & G.Forst.].

Cunningham A (1832o) [Untitled] in, Recent information from Australia, *Journal of the Royal Geographical Society of London* 2: 319–324. [Commentary on a letter from Lieut.-Colonel Dumaresq reporting an account by a runaway convict of the alleged discovery of a major river flowing from the Liverpool Plains to the Gulf of Carpentaria. Dumaresq, brother-in-law to Governor Darling and formerly his private secretary, was by this time owner of a large estate, St Heliers, near Muswellbrook.].

Cunningham A (1832p) [Untitled] in, Recent information from Australia, *Journal of the Royal Geographical Society of London* 2: 329–334. [Commentary on an expedition to the Peel and Namoi Rivers by Surveyor-General Major Thomas Mitchell. This was, in effect, an extension to his account of exploration in Australia published earlier in the year in the same Journal – see under major publications above].

Cunningham A (1833a) *Pomaderris betulina*, Birch-leaved Pomaderris, in Hooker WJ, *Curtis's Botanical Magazine* 60: t. 3212. (S.Curtis: London) [The author of this name must be cited as A.Cunn. alone, not A.Cunn. ex Hook. as in the Australian Plant Name Index – both the description and name are attributed to Cunningham. Still treated as *Pomaderris betulina* A.Cunn., now with two subspecies].

Cunningham A (1833b) *Pomaderris andromedaefolia*, Andromeda-leaved Pomaderris, in Hooker WJ, *Curtis's Botanical Magazine* 60: t. 3219. (S.Curtis: London) [Still treated as *Pomaderris andromedifolia* A.Cunn., now with two subspecies].

Cunningham A (1833c) *Psychotria daphnoides*, Daphne-like Psychotria, in Hooker WJ, *Curtis's Botanical Magazine* 60: t. 3228. (S.Curtis: London) [Of this plant Cunningham supplied only the name and provenance. The name should be attributed nomenclaturally as *Psychotria daphnoides* A.Cunn. ex Hook., and is still known under this name].

Cunningham A (1833d) *Leucopogon richei*, Riche's Leucopogon, in Hooker WJ, *Curtis's Botanical Magazine* 60: t. 3251. (S.Curtis: London) [Now included in *Leucopogon parviflorus* (Andrews) Lindl.].

Cunningham A (1833e) *Epacris heteronema*, Varying-stemmed Epacris, in Hooker WJ, *Curtis's Botanical Magazine* 60: t. 3257. (S.Curtis: London) [Still treated as *Epacris heteronema* Labill., now with two varieties].

Cunningham A (1833f) *Dracophyllum secundum*, Secund-flowered Dracophyllum, in Hooker WJ, *Curtis's Botanical Magazine* 60: t. 3264. (S.Curtis: London) [Still treated as *Dracophyllum secundum* R.Br.].

Cunningham A (1833g) Acacia verniciflua, Varnished Acacia, in Hooker WJ, Curtis's Botanical Magazine 60: t. 3266. (S.Curtis: London) [Still treated as Acacia verniciflua A.Cunn.].

Cunningham A (1833h) *Pimelea arenaria*, Sand Pimelea, in Hooker WJ, *Curtis's Botanical Magazine* 60: t. 3270. (S.Curtis: London) [Now *Pimelea villosa* subsp. *arenaria* (A.Cunn.) C.J.Burrows].

Cunningham A (1833i) *Plagianthus divaricatus*, Spreading Plagianthus, in Hooker WJ, *Curtis's Botanical Magazine* 60: t. 3271. (S.Curtis: London) [Still treated as *Plagianthus divaricatus* J.R.Forst. & G.Forst.].

Cunningham A (1833j) *Beaufortia dampieri*, Dampier's Beaufortia, in Hooker WJ, *Curtis's Botanical Magazine* 60: t. 3272. (S.Curtis: London) [Now included in *Beaufortia sprengelioides* (DC.) Craven].

Cunningham A (1833k) Cargillia australis, Southern Cargillia, in Hooker WJ, Curtis's Botanical Magazine 60: t. 3274. (S.Curtis: London) [Now Diospyros australis (R.Br.) Hiern.

Cunningham A (1833l) *Acacia graveolens*, Strong-scented Acacia, in Hooker WJ, *Curtis's Botanical Magazine* 60: t. 3279. (S.Curtis: London) [Now *Acacia leprosa* var. *graveolens* Maslin & D.J.Murphy].

Cunningham A (1833m) *Grevillea arenaria*, Sand Acacia, in Hooker WJ, *Curtis's Botanical Magazine* 60: t. 3285. (S.Curtis: London) [Still treated as *Grevillea arenaria* R.Br., now with two subspecies].

Cunningham A (1833n) *Marsdenia flavescens*, Yellowish-flowered Marsdenia, in Hooker WJ, *Curtis's Botanical Magazine* 60: t. 3289. (S.Curtis: London) [The authority for the name should be *Marsdenia flavescens* A.Cunn., not A.Cunn. ex Hook., as sometimes cited. Both the name and diagnosis are clearly attributed to Cunningham. The species is still recognised under this name.].

Cunningham A (1834a) Westringia cinerea, Ash-coloured Westringia, in Hooker WJ, Curtis's Botanical Magazine 61: t. 3307. (S.Curtis: London) [Now included in Westringia dampieri R.Br.].

Cunningham A (1834b) *Alyxia ruscifolia*, Butcher's-broom-leaved Alyxia, in Hooker WJ, *Curtis's Botanical Magazine* 61: t. 3312. (S.Curtis: London) [Still treated as *Alyxia ruscifolia* R.Br.].

Cunningham A (1834c) *Alyxia daphnoides*, Daphne-like Alyxia, in Hooker WJ, *Curtis's Botanical Magazine* 61: t. 3313. (S.Curtis: London) [Attached to this species treatment was a short 3-page paper by Cunningham 'Synopsis of the different species of Alyxia' listing and briefly describing the 13 species of *Alyxia* found world-wide. This species is now included in *Alyxia gynopogon* Roem. & Schult.].

Cunningham A (1834d) *Cyminosma oblongifolia*, Oblong-leaved Cyminosma, in Hooker WJ, *Curtis's Botanical Magazine* 61: t. 3322. (S.Curtis: London) [Now *Acronychia oblongifolia* (A.Cunn. ex Hook.) Endl. ex Heynh.].

Cunningham A (1834e) *Calythrix virgata*, Twiggy Calythrix, in Hooker WJ, *Curtis's Botanical Magazine* 61: t. 3323. (S.Curtis: London) [Includes descriptions, synonymies and key to all 12 species of *Calytrix* then known from Australia. Now included in *Calytrix tetragona* Labill.].

Cunningham A (1834f) *Trochocarpa laurina*, Cinnamon-leaved Trochocarpa, in Hooker WJ, *Curtis's Botanical Magazine* 61: t. 3324. (S.Curtis: London) [Still treated as *Trochocarpa laurina* (Rudge) R.Br.].

Cunningham A (1834g) *Pimelea hypericina*, Hypericum-leaved Pimelea, in Hooker WJ, *Curtis's Botanical Magazine* 61: t. 3330. (S.Curtis: London) [Now *Pimelea ligustrina* subsp. *hypericina* (A.Cunn.) Threlfall].

Cunningham A (1834h) *Trachymene lanceolata*, Lance-leaved Trachymene, in Hooker WJ, *Curtis's Botanical Magazine* 61: t. 3334. (S.Curtis: London) [Now *Platysace lanceolata* (Labill.) Druce].

Cunningham A (1834i) *Acacia elongata*, Slender Curved-leaved Acacia, in Hooker WJ, *Curtis's Botanical Magazine* 61: t. 3337. (S.Curtis: London) [Still treated as *Acacia elongata* Sieber ex DC.].

Cunningham A (1834j) *Acacia umbrosa*, Shady Acacia, in Hooker WJ, *Curtis's Botanical Magazine* 61: t. 3338. (S.Curtis: London) [Now included in *Acacia binervata* DC.].

Cunningham A (1834k) *Acacia lineata*, Narrow Lined-leaved Acacia, in Hooker WJ, *Curtis's Botanical Magazine* 61: t. 3346. (S.Curtis: London) [Still treated as *Acacia lineata* A.Cunn. ex G.Don].

Cunningham A (1834l) *Morinda jasminoides*, Jasmine-like Morinda, in Hooker WJ, *Curtis's Botanical Magazine* 61: t. 3351. (S.Curtis: London) [Still treated as *Morinda jasminoides* A.Cunn.].

Cunningham A (1835a) *Acacia undulaefolia*, Waved-leaved Variable Acacia, in Hooker WJ, *Curtis's Botanical Magazine* 62: t. 3394. (S.Curtis: London) [Still treated as *Acacia undulifolia* A.Cunn. ex G.Don].

Cunningham A (1835b) *Eurycles cunninghamii*, Small-flowered Eurycles, or Brisbane Lily, in Hooker WJ, *Curtis's Botanical Magazine* 62: t. 3399. (S.Curtis: London) [Now *Proiphys cunninghamii* (Aiton ex Lindl.) Mabb.].

Cunningham A (1835c) Chilodia scutellarioides, Scutellaria-like Chilodia, in Hooker WJ, Curtis's Botanical Magazine 62: t. 3405. (S.Curtis: London) [Now Prostanthera scutellarioides (R.Br.) Briq.].

Cunningham A (1835d) Westringia eremicola, Desert Westringia, in Hooker WJ, Curtis's Botanical Magazine 62: t. 3438. (S.Curtis: London) [Still treated as Westringia eremicola A.Cunn. ex Benth.].

Cunningham A (1835e) [Untitled, description of *Earina mucronata*, 1 p.] in Lindley J, *Oncidium ampliatum*. Broad-lipped Oncidium. *Edwards's Botanical Register* 20: t. 1699. (James Ridgeway: London) [Attribution of the generic and specific names is difficult. The account is certainly based largely on Cunningham's notes, but the way the text is structured means that the generic name must be assigned nomenclaturally to Lindley, the specific name perhaps to A.Cunn. ex Lindl. or as is usually done, to Lindley alone, i.e *Earina mucronata* Lindl.].

Cunningham A (1835f) Grevillea wilsonii A.Cunn., p. 273, in Wilson TB, Narrative of a Voyage Round the World, Comprehending an Account of the Wreck of the Ship "Governor Ready" in Torres Straits, a Description of the British Settlements on the Coasts of New Holland... (Sherwood, Gilbert & Piper: London) [Still treated as Grevillea wilsonii A.Cunn.].

Cunningham A (1836a) *Veronica labiata*, Fragrant White-flowered Speedwell, in Hooker WJ, *Curtis's Botanical Magazine* 63: t. 3461. (S.Curtis: London) [Now included in *Veronica derwentiana* Andrews].

Cunningham A (1836b) *Acacia prominens*, Conspicuous Acacia, in Hooker WJ, *Curtis's Botanical Magazine* 63: t. 3502. (S.Curtis: London) [Still treated as *Acacia prominens* A.Cunn. ex G.Don].

Cunningham A (1836c) [Untitled, description of *Dendrobium cassythoides* R.Cunn., 2 pp.], in Lindley J, *Dendrobium densiflorum*, Dense-flowered Dendrobium. *Edwards's Botanical Register* 21: t. 1828. (James Ridgeway: London) [This is a paper within a paper within a paper: an article by Lindley, in which he reproduces a note from Allan Cunningham, which in turn reproduces a name and description by Richard Cunningham. The last should be attributed as author of the name, although Allan Cunningham is usually cited. This species is now *Erythrorchis cassythoides* (R.Cunn.) Garay].

Cunningham A (1836d) [Untitled, on Australian *Tristania* spp., 2 pp.], in Lindley J, *Tristania macrophylla*. Large-leaved Tristania. *Edwards's Botanical Register* 21: t. 1839. (James Ridgeway: London) [*Tristania macrophylla* A.Cunn. ex Lindl. is now included in *Lophostemon confertus* (R.Br.) Peter G.Wilson & J.T.Waterh.; *Tristania umbrosa* A.Cunn. is now *Xanthostemon umbrosa* (A.Cunn.) Peter G.Wilson & J.T.Waterh.; *Tristania psidioides* A.Cunn. is now *Xanthostemon psidioides* (A.Cunn.) Peter G.Wilson & J.T.Waterh.; *Tristania salicina* A.Cunn. is now included in *Tristania neriifolia* (Sims) R.Br.].

Cunningham A (1836e) [Untitled, on apetalous *Fuchsia* spp., 1 p.], in Lindley J, *Godetia lepida*. Smart Godetia. *Edwards's Botanical Register* 22: t. 1849. (James Ridgeway: London) [The New Zealand species is still treated as *Fuchsia procumbens* R.Cunn. ex A.Cunn., although its publication is sometimes credited to Allan Cunningham, *Ann. Nat. Hist.* 3: 31 (1839)]

Cunningham A (1843) Notes, for the most part geographical, on the Orchidaceous plants of Australia, [unpaginated, 5 pp.], in Lindley J, *Dendrobium cucumerinum*. Cucumber Dendrobium. *Edwards's Botanical Register* 29: t. 37. (James Ridgeway: London)

Cunningham A (1847) *Spartothamnus* All. Cunn., p. 694, in Walpers WG, *Repertorium Botanices Systematicae*, vol. 6(4). (F.Hofmeister: Lipsiae) [The name *Spartothamnus*, and that of the only species *S. junceus* were all attributed to Cunningham, but the descriptions are by Walpers, making the author attribution in both cases A.Cunn. ex Walp. Unfortunately *Spartothamnus* is a later homonym of *Spartothamnus* Presl, and in 1895 Briquet coined the replacement name *Spartothamnella*. The species is now known as *Spartothamnella juncea* (A.Cunn. ex Lindl.) Briq.].

Cunningham A (1872) *Grevillea rosmarinifolia* A.Cunn., in Hooker JD, *Curtis's Botanical Magazine* 98: t. 5971. (L.Reeve & Co.: London) [This is an extreme case of delayed publication. The information on provenance in this article was sent to W.J.Hooker in a letter from Cunningham on 30th April 1832, and published almost *verbatim* by J.D.Hooker 40 years later! The species is still treated as *Grevillea rosmarinifolia* A.Cunn.]